UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,586	04/15/2004	Jinquan Dai	42339-200559	6641

26694 7590 09/24/2008

VENABLE LLP
P.O. BOX 34385
WASHINGTON, DC 20043-9998

EXAMINER	
CHAVIS, JOHN Q	

ART UNIT	PAPER NUMBER
2193	

MAIL DATE	DELIVERY MODE
09/24/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/824,586	DAI ET AL.	
	Examiner	Art Unit	
	John Chavis	2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 April 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6,10-15 and 19-22* is/are rejected.

7)☒ Claim(s) *7-9 and 16-18* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 April 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1-18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 1 recites a method; however, nothing in the claim appears to specify that the method is implemented in a statutory environment. The identifying and the providing steps are the only steps of the claim and neither refers to components of a statutory environment. Furthermore, the identifying step can be implemented by merely pointing to a specific data name in a program and providing can be merely ensuring that the data name is defined in the stage (or section of the program where it is expected).

As per claim 10, the applicant claims a machine accessible medium. However, the specifications define the term as including a carrier wave. The claims are directed to a signal directly or indirectly by claiming a medium and the Specification recites evidence where the computer readable medium is defined as a ***"wave"*** (such as a carrier wave), see sect. 0015. In that event, the claims are directed to a form of energy which at present the office feels does not fall into a category of invention.

The dependent claims are rejected as their respective parent.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rodgers et al. (2003/0126186) in view of the applicant's admitted prior art in the background of the invention.

1. A method comprising: identifying data required by each of at least two stages of a partitioned program (see fig. 1 in which items 140 and 160 are at least two stages of a partitioned resource program. See also sects. 0041-0042), wherein at least one of said stages comprises more than one thread (in fig. 1 both stages can comprise more than on thread via the "..." indications at the bottom of each resource), and which data is defined in a previous stage (see sect. 0025); and providing for transmission of said required data between consecutive stages (see sect.0026). The features taught in sect. 0026 are considered sufficient to show that transmission between stages. However, assuming, for argument sake that the applicant does not feel the feature is provided, The feature is specified in sects. 0001-0002 of the applicant's specifications. Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to enable transmission between stages in Rodgers system to ensure that the required data is provided from an earlier stage so the next stage will function properly.

2. The method according to claim 1, wherein said providing for transmission comprises: putting each piece of required data into a pipe following a point immediately following its

definition in a stage in which it is defined (see again the rejection above); and getting from said pipe each piece of data required by a subsequent stage at a point in the subsequent stage that corresponds to the point at which the piece of required data was put into the pipe (see again sect. 0002 of the applicant's specification).

3. The method according to claim 1, wherein said providing for transmission comprises: placing into a pipe, at an end of each stage, data required for a subsequent stage of said program; and getting from said pipe, at a beginning of each stage, data required for that stage and defined in a previous stage, see the rejection of claim 2.

4. The method according to claim 1, wherein said identifying data required comprises: determining required data based on conditional statements in said program, how data is identified is considered a choice of design and Rodgers does not specify and therefore is considered to be capable of determining required data based on any known method. Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to enable conditional statements to be used when multiple options are available.

5. The method according to claim 1, wherein said identifying data required comprises: rendering said program such that definitions of live data in one or more stages in which they are initially defined and their uses in subsequent stages are made explicit by introducing an alternative representation of each piece of live data following its definition

and substituting said alternative representation for each subsequent occurrence of said piece of live data in said program (see sect. 0064, which provides for checking whether data values have changed).

6. The method according to claim 5, wherein said identifying data required further comprises: making one or more pairwise determinations as to whether pieces of live data interfere (see the rejection of claim 5).

Claims 10-15 are rejected as claims 1-6.

As per claim 19, see the rejection of claim 1.

The features of claims 20-21 are taught via claims 5-6 above.

In reference to claim 22, see the rejection of claim 2 above, in which the pipe represents memory.

Allowable Subject Matter

3. Claims 7-9 and 16-18 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Chavis whose telephone number is (571) 272-3720. The examiner can normally be reached on M-F, 9:00am-5:30pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lewis Bullock can be reached on (571) 272-3759. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JC/

/John Chavis/
Primary Examiner, Art Unit 2193